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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DANIELS, ANTHONY J	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,479	LIU ET AL.	
	Examiner	Art Unit	
	Anthony J. Daniels	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *34 and 35* is/are allowed.

6)☒ Claim(s) *1-17,20-33 and 36* is/are rejected.

7)☒ Claim(s) *18 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/13/01 & 2/22/02.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 10-35 have been renumbered 11-36.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Trevino et al. (US # 20020012056).

As to claim **26**, Trevino et al. teaches an apparatus configured to estimate illumination on a sensor during an exposure period, said apparatus comprising: a sampling means configured to measure, at a multiplicity of time intervals during said exposure period, an illumination indication from a sensor (see [0032], Lines 8-12); and an estimation means configured to determine, based on weighted averaging, an estimated illumination on said sensor from said

multiplicity of measurements (see [0048], Lines 1-8). *The language "and configured thereby to produce a multiplicity of measurements" is an inherent consequence of the sampling process.*

As to claim **27**, Trevino et al. teaches the apparatus of claim 26, wherein said sensor is implemented in a sensor array, a pixel sensor in a single chip imaging device, a pixel sensor in a digital camera, pixel sensor in a video camera, a pixel sensor in a stereo digital camera, or a pixel sensor in a stereo video camera (see [0052], Lines 1-4).

As to claim **28**, Trevino et al. teaches the apparatus of claim 26, wherein said sensor is a photodiode (see Figure 2, node "254"; *{The node which collects light performs the same function as a photodiode.}*) and said illumination indication is a charge accumulated from photocurrent produced by photodiode (*This an inherent feature of CMOS image sensors.).*

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3,8,9,11,16,29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trevino et al. (see Patent Number above) in view of Yoshida (JP-63-201406).

As to claim **1**, Trevino et al. teaches an estimation method for estimating illumination sensor capable of capturing a plurality of image samples during an exposure period, said method comprising the steps: measuring an illumination indication from said sensor, measuring occurs a multiplicity of times at intervals during said exposure period (see [0032], Lines 8-12); and determining, based on weighted averaging, an estimated illumination on said sensor from said multiplicity of measurements (see [0048], Lines 1-8, "...final output signal..."). *The language "thereby producing a multiplicity of measurements" is an inherent consequence of the sampling process.* The claim differs from Trevino et al. in that it further requires that the plurality of image samples be captured non-destructively.

In the same field of endeavor, Yoshida teaches a non-destructive read-type imager for capturing plural images (see Purpose, Lines 1-3). In light of the teaching of Yoshida, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image sensor of Trevino et al. to output non-destructive image signals. Such a modification would allow for a more accurate approach to image sampling, since more samples would be made available for processing.

As to claim **2**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 1, wherein said sensor is a photodiode (see Trevino et al., Figure 2, node "254"; *{The node which collects light performs the same function as a photodiode.}*) and said illumination

indication is a charge accumulated from photocurrent produced by said photodiode (*This is an inherent feature of CMOS image sensors.*).

As to claim **3**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 2, wherein said measuring step occurring non-destructively (see Yoshida, Purpose, Lines 1-3) and said charge accumulating over said exposure period (*This is an inherent feature of CMOS image sensors.*).

As to claim **8**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 1, wherein said sensor is configured in a sensor array, a pixel sensor in a digital camera, a pixel sensor in a video camera, a pixel sensor in a stereo digital camera, or a pixel sensor in a stereo video camera (see Trevino et al., [0052], Lines 1-4).

As to claim **9**, Trevino et al. teaches an estimation method for non-recursively estimating an optimal illumination on a sensor capable of capturing a plurality of image samples during an exposure period, said method comprising the steps of: measuring an illumination indication from said sensor (see [0032], Lines 8,9); storing said illumination indication (see [0032], Lines 9,10), wherein said measuring and storing steps occur a multiplicity of times during said exposure period (see [0032], Lines 9-15); and performing a non-recursive optimal illumination estimation on said sensor from said collected multiplicity of measurements (see [0048], Lines 1-4, "...final output signal..."). *The language "thereby collecting a multiplicity of measurements" is an inherent consequence of the sampling process.* The claim differs from Trevino et al. in that it further requires that the plurality of image samples be captured non-destructively.

In the same field of endeavor, Yoshida teaches a non-destructive read-type imager for capturing plural images (see Purpose, Lines 1-3). In light of the teaching of Yoshida, it would

have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image sensor of Trevino et al. to output non-destructive image signals. Such a modification would allow for a more accurate approach to image sampling, since more samples would be made available for processing.

As to claim **11**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 9, wherein said sensor is a photodiode (see Trevino et al., Figure 2, node "254"; *{The node which collects light performs the same function as a photodiode.}*) and said illumination indication is a charge accumulated from photocurrent produced by said photodiode (*This is an inherent feature of CMOS image sensors.*).

As to claim **16**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 9, wherein said sensor is configured in a sensor array, a pixel sensor in a digital camera, a pixel sensor in a video camera, a pixel sensor in a stereo digital camera, or a pixel sensor in a stereo video camera (see Trevino et al., [0052], Lines 1-4).

As to claim **29**, Trevino et al., teaches the apparatus of claim 28, wherein said sampling means operates non-destructively (see Yoshida, Purpose, Lines 1-3) and said charge accumulates over said exposure period (*This is an inherent feature of CMOS image sensors.*).

5. Claims 4,10,12 rejected under 35 U.S.C. 103(a) as being unpatentable over Trevino et al. (see Patent Number above) in view of Yoshida (see Patent Number above) and further in view of Pucker II, et al. (US # 6,298,144).

It is noted that the USPTO considers the language "selected from" to mean any one of the corresponding elements upon which selection is to be made.

As to claim **4**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 1, and statistical signal processing of said multiplicity of measurements (see [0048], Lines 8-10). The claim differs from Trevino et al., as modified by Yoshida, in that it further requires that said signal processing be based on a noise model selected from a fixed pattern noise model, a reset noise model, a shot noise model, and a read noise model.

In the same field of endeavor, Pucker II, et al. teaches the use of a median filter (see Figure 2, median filter "37"; Col. 4, Lines 47-49; *{Median Filters have principal use in eliminating shot noise.}*). In light of the teaching of Pucker II, et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a median filter in the determining step of Trevino et al., as modified by Yoshida. Such a filter can effectively remove shot noise, which can cause considerable degradation in image quality.

As to claim **10**, the limitations of claim 10 can be found in claim 4. Therefore, claim 10 is analyzed and rejected as previously discussed with respect to claim 4.

As to claim **12**, Trevino et al., as modified by Yoshida and Pucker II, et al., teaches the estimation method of claim 10, wherein said measuring step occurring non-destructively (see Yoshida, Purpose, Lines 1-3) and said charge accumulating over said exposure period (*This is an inherent feature of CMOS image sensors.*).

6. Claims 5-7,13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trevino et al. (see Patent Number above) in view of Yoshida (see Patent Number above) and further in view of Sezan et al. (US # 5,600,731).

As to claim **5**, Trevino et al., as modified by Yoshida, teaches the estimation method of claim 1 and statistical signal processing of said multiplicity of measurements (see [0048], Lines 8-10). The claim differs from Trevino et al., as modified by Yoshida, in that it further requires signal processing be based on maximizing a likelihood of accuracy of said estimated illumination.

In the same field of endeavor, Sezan et al. teaches linear minimum means square error estimates on noisy images (see Abstract, Lines 8-11; *{Maximizing the likelihood of accuracy is being interpreted as minimizing the error.}*). In light of the teaching of Sezan et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the statistical signal processing of Trevino et al., as modified by Yoshida, to include linear minimum mean square error as a way of maximizing the likelihood of accuracy of the estimated illumination. Linear Minimum mean Square Error provides a more accurate and robust way of suppressing noise error in images.

As to claim **6**, the limitations of claim 6 can be found in claim 5. Therefore, claim 6 is analyzed and rejected as previously discussed with respect to claim 5. *Maximizing the likelihood of accuracy is being interpreted as minimizing the error.*

As to claim **7**, the limitations of claim 7 can be found in claim 5. Therefore, claim 7 is analyzed and rejected as previously discussed with respect to claim 5. *Maximizing the likelihood of accuracy is being interpreted as minimizing the error.*

As to claim **13**, the limitations of claim 13 can be found in claim 5. Therefore, claim 13 is analyzed and rejected as previously discussed with respect to claim 5.

As to claim **14**, the limitations of claim 14 can be found in claim 6. Therefore, claim 14 is analyzed and rejected as previously discussed with respect to claim 6.

As to claim **15**, the limitations of claim 15 can be found in claim 7. Therefore, claim 15 is analyzed and rejected as previously discussed with respect to claim 7.

7. Claims 17,20,21,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidari (US # 5,905,533) in view of Yoshida (see Patent Number above).

As to claim **17**, Hidari teaches an estimation method for recursively estimating an optimal illumination on a sensor (see Col. 2, Lines 38-42) capable of capturing a plurality of image samples during an exposure period (see Col. 2, Lines 65-67; Col. 3, Lines 1-6), said method comprising the steps of: measuring an illumination indication from said sensor (see Col. 2, Lines 65-67), said measuring occurs a multiplicity of times at intervals during said exposure period (see 2, Lines 65-67; Col. 3, Lines 1-6; "...past image signal..."); and determining an estimated illumination on said sensor from said multiplicity of measurements (see Col. 2, Lines 33-37, "...stop value.", said determining step occurring recursively (see Col. 2, Line 66, "...circulatively...") over said multiplicity of measurements and including statistical signal processing of said multiplicity of measurements, said signal processing being based on a noise model selected from a fixed pattern noise model, a reset noise model, a shot noise model and a read noise model (see Col. 1, Lines 42,43; *{This type of noise is read-out noise.}*). *The language "thereby collecting a multiplicity of measurements" is an inherent consequence of the sampling process.* The claim differs from Hidari in that it further requires that the plurality of image samples be captured non-destructively.

In the same field of endeavor, Yoshida teaches a non-destructive read-type imager for capturing plural images (see Purpose, Lines 1-3). In light of the teaching of Yoshida, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the image sensor of Hidari to output non-destructive image signals. Such a modification would allow for a more accurate approach to image sampling, since more samples would be made available for processing.

As to claim **20**, Hidari, as modified by Yoshida, teaches the estimation method of claim 17, wherein said illumination indication is a charge accumulated from a produced photocurrent. Hidari, as modified by Yoshida, does not specifically teach the sensor as a photodiode. **Official Notice** is taken that both the concept and advantages of using a photodiode as an image sensor are well known and expected in the art. It would have been obvious to one of ordinary skill in the art to use the a photodiode as the image sensor, because photodiodes are much smaller than other image sensing devices and can be mass implemented on a single substrate.

As to claim **21**, Hidari, as modified by Yoshida, teaches the estimation method of claim 17, wherein said measuring step occurring non-destructively (see Yoshida, Purpose, Lines 1-3) and said charge accumulating over said exposure period (*This is an inherent feature of CMOS image sensors.*).

As to claim **25**, Hidari, as modified by Yoshida, teaches the estimation method of claim 17, wherein said sensor is configured in a sensor array, a pixel sensor in a digital camera, a pixel sensor in a video camera, a pixel sensor in a stereo digital camera or a pixel sensor in a stereo video camera (see Trevino et al., [0052], Lines 1-4).

8. Claims 22-24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidari (see Patent Number above) in view of Yoshida (see Patent Number above) and further in view of Sezan et al. (see Patent Number above).

As to claim **22**, Hidari, as modified by Yoshida, teaches the estimation method of claim 1 and statistical signal processing of said multiplicity of measurements (see Col. 1, Lines 42,43). The claim differs from Trevino et al., as modified by Yoshida, in that it further requires signal processing be based on maximizing a likelihood of accuracy of said estimated illumination.

In the same field of endeavor, Sezan et al. teaches linear minimum means square error estimates on noisy images (see Abstract, Lines 8-11; *{Maximizing the likelihood of accuracy is being interpreted as minimizing the error.}*). In light of the teaching of Sezan et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the statistical signal processing of Hidari, as modified by Yoshida, to include linear minimum mean square error as a way of maximizing the likelihood of accuracy of the stop value. Linear Minimum Mean Square Error provides a more accurate and robust way of suppressing noise error in images.

As to claim **23**, the limitations of claim 23 can be found in claim 22. Therefore, claim 23 is analyzed and rejected as previously discussed with respect to claim 22. *Maximizing the likelihood of accuracy is being interpreted as minimizing the error.*

As to claim **24**, the limitations of claim 24 can be found in claim 22. Therefore, claim 24 is analyzed and rejected as previously discussed with respect to claim 22. *Maximizing the likelihood of accuracy is being interpreted as minimizing the error.*

9. Claims 30,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trevino et al. (see Patent Number above) in view of Pucker II, et al. (see Patent Number above).

As to claim **30**, Trevino et al. teaches the apparatus of claim 26, wherein said estimation means being configured to perform statistical signal processing of said multiplicity of measurements (see [0048], Lines 6-8). The claim differs from Trevino et al. in that it further requires that said signal processing be based on a noise model selected from a fixed pattern noise model, a reset noise model, a shot noise model and a read noise model.

In the same field of endeavor, Pucker II, et al. teaches the use of a median filter (see Figure 2, median filter "37"; Col. 4, Lines 47-49; *{Median Filters have principal use in eliminating shot noise.}*). In light of the teaching of Pucker II, et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a median filter in the statistical signal processing of Trevino et al. Such a filter can effectively remove shot noise, which can cause considerable degradation in image quality.

As to claim **36**, Trevino et al. teaches an apparatus configured to estimate illumination on a sensor during an exposure period (see [0048], Lines 1-3) for improving dynamic range (see Title), where said sensor is configured in a complementary metal oxide semiconductor (CMOS) image sensor system (see Figure 2) capable of capturing multiple image samples during said exposure period (see [0032], Lines 7,8), said apparatus comprising: means for measuring, at a multiplicity of intervals during said exposure period, actual photocurrent from said sensor (see [0032], Lines 7,8) said means for measuring thereby producing a multiplicity of photocurrent measurements (see [0032], Lines 7,8); and means for estimating optimal photocurrent on said sensor from said multiplicity of measurements (see [0048], Lines 1-3, "...final output value...").

The claim differs from Trevino et al. in that it requires that the apparatus reduce noise while improving dynamic range at the low illumination end.

In the same field of endeavor, Pucker II, et al. teaches reducing noise and simultaneously improving dynamic range at the low illumination end (see Figure 2, median filter "37"; Col. 4, Lines 47-49; *{Median Filters have principal use in eliminating shot noise; furthermore, improvement of dynamic range at the low illumination end is a direct consequence of noise reduction.}*). In light of the teaching of Pucker II, et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to reduce noise in the sensor of Trevino et al. while simultaneously improving dynamic range at the low illumination end. Such a reduction would allow for a more accurate and natural final output value.

10. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trevino et al. (see Patent Number above) in view of Sezan et al. (see Patent Number above).

As to claim **31**, Trevino et al. teaches the estimation method of claim 1 and statistical signal processing of said multiplicity of measurements (see [0048], Lines 8-10). The claim differs from Trevino et al. in that it further requires signal processing be based on maximizing a likelihood of accuracy of said estimated illumination.

In the same field of endeavor, Sezan et al. teaches linear minimum means square error estimates on noisy images (see Abstract, Lines 8-11; *{Maximizing the likelihood of accuracy is being interpreted as minimizing the error.}*). In light of the teaching of Sezan et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the statistical signal processing of Trevino et al. to include linear minimum mean square

error as a way of maximizing the likelihood of accuracy of the final output value. Linear Minimum Mean Square Error provides a more accurate and robust way of suppressing noise error in images.

As to claim **32**, the limitations of claim 32 can be found in claim 31. Therefore, claim 32 is analyzed and rejected as previously discussed with respect to claim 31. *Maximizing the likelihood of accuracy is being interpreted as minimizing the error.*

As to claim **33**, the limitations of claim 33 can be found in claim 31. Therefore, claim 33 is analyzed and rejected as previously discussed with respect to claim 31. *Maximizing the likelihood of accuracy is being interpreted as minimizing the error.*

Allowable Subject Matter

11. Claims 18,19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: As to claim **18**, the prior art does not teach or fairly suggest the maintained parameter, overall variance of said multiplicity of measurements. As to claim **19**, the prior art does not teach or fairly suggest the maintained parameter, covariance of an estimated illumination with one of the multiplicity of measurements.

12. Claims **34** and **35** are allowed.

The following is an examiner's statement of reasons for allowance: As to claim **34**, the prior art does not teach or fairly suggest the maintained parameter, overall variance of said multiplicity of measurements. As to claim **35**, the prior art does not teach or fairly suggest the maintained parameter, covariance of an estimated illumination with one of the multiplicity of measurements.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Daniels whose telephone number is (703) 305-4807. The examiner can normally be reached on 8:00 A.M. - 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andy Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD
1/7/2005

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